



UNITED STATES PATENT AND TRADEMARK OFFICE

ch
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,386	10/04/2002	Adam C. Bell	2026-4297US	1384

45733 7590 10/05/2006

LEYDIG, VOIT & MAYER, LTD.
TWO PRUDENTIAL PLAZA, SUITE 4900
180 NORTH STETSON AVENUE
CHICAGO, IL 60601-6780

EXAMINER

WHITEMAN, BRIAN A

ART UNIT PAPER NUMBER

1635

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/019,386	Applicant(s) BELL ET AL.	
	Examiner Brian Whiteman	Art Unit 1635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-27 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Election/Restrictions

Claims 1-27 are pending.

NOTE: Claim 27 contains more than 10 nucleotide sequences. See MPEP 2434.

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted:

Group I, claim(s) 1-15, drawn to an isolated DNA molecule comprising SEQ ID NO: 1 and method of using the isolated DNA molecule.

Group II, claim(s) 16 and 19-21, drawn to an isolated DNA molecule comprising the sequence shown in SEQ ID NO: 84.

Group III, claim(s) 16 and 19-21, drawn to an isolated DNA molecule comprising the sequence shown in SEQ ID NO: 85.

Group IV, claim(s) 16 and 19-21, drawn to an isolated DNA molecule comprising the sequence shown in SEQ ID NO: 86.

Group V, claim(s) 16 and 19-21, drawn to an isolated DNA molecule comprising the sequence shown in SEQ ID NO: 87.

Group VI, claim(s) 17 and 19-21, drawn to an isolated DNA molecule comprising the sequence shown in SEQ ID NO: 88.

Art Unit: 1635

Group VII, claim(s) 17 and 19-21, drawn to an isolated DNA molecule comprising the sequence shown in SEQ ID NO: 89.

Group VIII, claim(s) 17 and 19-21, drawn to an isolated DNA molecule comprising the sequence shown in SEQ ID NO: 90.

Group IX, claim(s) 17 and 19-21, drawn to an isolated DNA molecule comprising the sequence shown in SEQ ID NO: 91.

Group X, claim(s) 18-21, drawn to an isolated DNA molecule comprising the sequence shown in SEQ ID NO: 92.

Group XI, claim(s) 18-21, drawn to an isolated DNA molecule comprising the sequence shown in SEQ ID NO: 93.

Group XII, claim(s) 18-21, drawn to an isolated DNA molecule comprising the sequence shown in SEQ ID NO: 94.

Group XIII, claim(s) 18-21, drawn to an isolated DNA molecule comprising the sequence shown in SEQ ID NO: 95.

Group XIV, claim(s) 18-21, drawn to an isolated DNA molecule comprising the sequence shown in SEQ ID NO: 96.

Group XV, claim(s) 18-21, drawn to an isolated DNA molecule comprising the sequence shown in SEQ ID NO: 97.

Group XVI, claim(s) 18-21, drawn to an isolated DNA molecule comprising the sequence shown in SEQ ID NO: 98.

Group XVII, claim(s) 22-27, drawn to a method of activating the expression of a gene from a cis-acting DNA regulatory sequences in the chromatin into which the gene has integrated using an isolated DNA construct comprising the sequence shown in SEQ ID NO: 84.

Group XVIII, claim(s) 22-27, drawn to a method of activating the expression of a gene from a cis-acting DNA regulatory sequences in the chromatin into which the gene has integrated using an isolated DNA construct comprising the sequence shown in SEQ ID NO: 85.

Group XIX, claim(s) 22-27, drawn to a method of activating the expression of a gene from a cis-acting DNA regulatory sequences in the chromatin into which the gene has integrated using an isolated DNA construct comprising the sequence shown in SEQ ID NO: 86.

Group XX, claim(s) 22-27, drawn to a method of activating the expression of a gene from a cis-acting DNA regulatory sequences in the chromatin into which the gene has integrated using an isolated DNA construct comprising the sequence shown in SEQ ID NO: 87.

Group XXI, claim(s) 22-27, drawn to a method of activating the expression of a gene from a cis-acting DNA regulatory sequences in the chromatin into which the gene has integrated using an isolated DNA construct comprising the sequence shown in SEQ ID NO: 88.

Group XXII, claim(s) 22-27, drawn to a method of activating the expression of a gene from a cis-acting DNA regulatory sequences in the chromatin into which the gene has integrated using an isolated DNA construct comprising the sequence shown in SEQ ID NO: 89.

Group XXIII, claim(s) 22-27, drawn to a method of activating the expression of a gene from a cis-acting DNA regulatory sequences in the chromatin into which the gene has integrated using an isolated DNA construct comprising the sequence shown in SEQ ID NO: 90.

Group XXIV, claim(s) 22-27, drawn to a method of activating the expression of a gene from a cis-acting DNA regulatory sequences in the chromatin into which the gene has integrated using an isolated DNA construct comprising the sequence shown in SEQ ID NO: 91.

Group XXV, claim(s) 22-27, drawn to a method of activating the expression of a gene from a cis-acting DNA regulatory sequences in the chromatin into which the gene has integrated using an isolated DNA construct comprising the sequence shown in SEQ ID NO: 92.

Group XXVI, claim(s) 22-27, drawn to a method of activating the expression of a gene from a cis-acting DNA regulatory sequences in the chromatin into which the gene has integrated using an isolated DNA construct comprising the sequence shown in SEQ ID NO: 93.

Group XXVII, claim(s) 22-27, drawn to a method of activating the expression of a gene from a cis-acting DNA regulatory sequences in the chromatin into which the gene has integrated using an isolated DNA construct comprising the sequence shown in SEQ ID NO: 94.

Group XXVIII, claim(s) 22-27, drawn to a method of activating the expression of a gene from a cis-acting DNA regulatory sequences in the chromatin into which the gene has integrated using an isolated DNA construct comprising the sequence shown in SEQ ID NO: 95.

Group XXIX, claim(s) 22-27, drawn to a method of activating the expression of a gene from a cis-acting DNA regulatory sequences in the chromatin into which the gene has integrated using an isolated DNA construct comprising the sequence shown in SEQ ID NO: 96.

Group XXX, claim(s) 22-27, drawn to a method of activating the expression of a gene from a cis-acting DNA regulatory sequences in the chromatin into which the gene has integrated using an isolated DNA construct comprising the sequence shown in SEQ ID NO: 97.

Art Unit: 1635

Group XXXI, claim(s) 22-27, drawn to a method of activating the expression of a gene from a cis-acting DNA regulatory sequences in the chromatin into which the gene has integrated using an isolated DNA construct comprising the sequence shown in SEQ ID NO: 98.

Group XXXII, claim(s) 22-27, drawn to a method of activating the expression of a gene from a cis-acting DNA regulatory sequences in the chromatin into which the gene has integrated using an isolated DNA construct comprising the sequence shown in SEQ ID NO: 99.

Group XXXIII, claim(s) 22-27, drawn to a method of activating the expression of a gene from a cis-acting DNA regulatory sequences in the chromatin into which the gene has integrated using an isolated DNA construct comprising the sequence shown in SEQ ID NO: 100.

The inventions listed as Groups I-XXXIII do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical feature for the following reasons:

37 CFR 1.475(b) states:

“An international or a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn only to one of the following combinations of categories:

- (1) A product and a process specially adapted for the manufacture of said product; or
- (2) A product and process of use of said product; or
- (3) A product, a process specially adapted for the manufacture of the said product, and a use of the said product; or

Art Unit: 1635

(4) A process and an apparatus or means specifically designed for carrying out the said process; or

(5) A product, a process specially adapted for the manufacture of the said product, and an apparatus or means specifically designed for carrying out the said process.

37 CFR 1.475(c) states:

“If an application contains claims to more or less than one of the combination of categories of invention set forth in paragraph (b) of this section, unity of invention might not be present.”

37 CFR 1.475(d) also states:

“If multiple products, processes of manufacture or uses are claimed, the first invention of the category first mentioned in the claims of the application and the first recited invention of each other categories related thereto will be considered as the main invention in the claims, see PCT Article 17(3)(a) and 1.476(c).”

37 CFR 1.475(e) further states:

“The determination whether a group of inventions is so linked as to form a single general inventive concept shall be made without regard to whether the inventions are claimed in separate claims or as alternative within a single claim.”

In view of 37 CFR 1.475 (b), 37 CFR 1.475 (c), 37 CFR 1.475 (d), and 37 CFR 1.475 (e), Group I is considered the main invention to the product first mentioned in the claims, and the first recited invention drawn to other categories related thereto, e.g. a method of making, method of use.

Group I does not require the SEQ ID NOs in Groups II-XXXIII and vice versa. Groups II-XV recite distinct SEQ ID NOs.

The technical feature linking groups XVI-XXXIII appears to be an isolated DNA molecule comprising an insulator element found in IGF2 locus from a mammal.

However, Frevel et al. teach an isolated nucleotide sequence comprising SEQ ID NO: 92 (1999, AH, cited on a PTO1449). NOTE: the provisional application cited in the oath does not disclose SEQ ID NOs. 84-100.

Therefore, the technical feature linking the inventions of groups I-XXXIII does not constitute a special technical feature as defined by PCT Rule 13.2, as it does not define a contribution over the prior art.

The special technical feature of Group I is considered to be SEQ ID NO: 1.

The special technical feature of Group II is considered to be SEQ ID NO: 84.

The special technical feature of Group III is considered to be SEQ ID NO: 85.

The special technical feature of Group IV is considered to be SEQ ID NO: 86.

The special technical feature of Group V is considered to be SEQ ID NO: 87.

The special technical feature of Group VI is considered to be SEQ ID NO: 88.

The special technical feature of Group VII is considered to be SEQ ID NO: 89.

The special technical feature of Group VIII is considered to be SEQ ID NO: 90.

The special technical feature of Group IX is considered to be SEQ ID NO: 91.

The special technical feature of Group X is considered to be SEQ ID NO: 92.

The special technical feature of Group XI is considered to be SEQ ID NO: 93.

The special technical feature of Group XII is considered to be SEQ ID NO: 94.

Art Unit: 1635

The special technical feature of Group XIII is considered to be SEQ ID NO: 95.

The special technical feature of Group XIV is considered to be SEQ ID NO: 96.

The special technical feature of Group XV is considered to be SEQ ID NO: 97.

The special technical feature of Group XVI is considered to be SEQ ID NO: 98.

The special technical feature of Group XVII is considered to be a method of using SEQ ID NO: 84.

The special technical feature of Group XVIII is considered to be a method of using SEQ ID NO: 85.

The special technical feature of Group XIX is considered to be a method of using SEQ ID NO: 86.

The special technical feature of Group XX is considered to be a method of using SEQ ID NO: 87.

The special technical feature of Group XXI is considered to be a method of using SEQ ID NO: 88.

The special technical feature of Group XXII is considered to be a method of using SEQ ID NO: 89.

The special technical feature of Group XXIII is considered to be a method of using SEQ ID NO: 90.

The special technical feature of Group XXIV is considered to be a method of using SEQ ID NO: 91.

The special technical feature of Group XXV is considered to be a method of using SEQ ID NO: 92.

Art Unit: 1635

The special technical feature of Group XXVI is considered to be a method of using SEQ ID NO: 93.

The special technical feature of Group XXVII is considered to be a method of using SEQ ID NO: 94.

The special technical feature of Group XXVIII is considered to be a method of using SEQ ID NO: 95.

The special technical feature of Group XXIX is considered to be a method of using SEQ ID NO: 96.

The special technical feature of Group XXX is considered to be a method of using SEQ ID NO: 97.

The special technical feature of Group XXXI is considered to be a method of using SEQ ID NO: 98.

The special technical feature of Group XXXII is considered to be a method of using SEQ ID NO: 99.

The special technical feature of Group XXXIII is considered to be a method of using SEQ ID NO: 100.

Accordingly, Groups I-XXXIII are not so linked by the same or a corresponding technical feature as to form a single general inventive concept.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Whiteman whose telephone number is (571) 272-0764. The examiner can normally be reached on Monday through Friday from 7:00 to 4:00 (Eastern Standard Time), with alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Paras, SPE – Art Unit 1635, can be reached at (571) 272-4517.

Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center. The faxing of

Art Unit: 1635

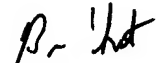
such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Fax Center number is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Brian Whiteman



BRIAN WHITEMAN
PATENT EXAMINER